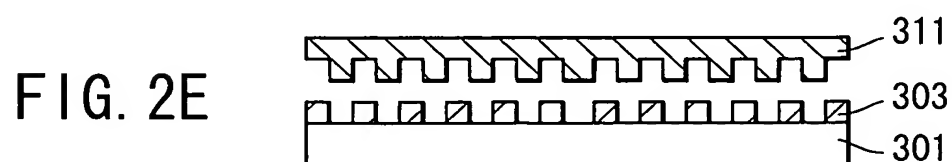
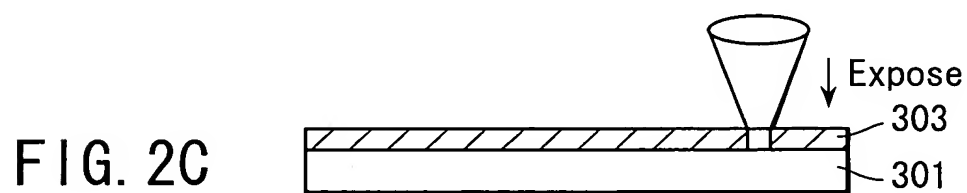
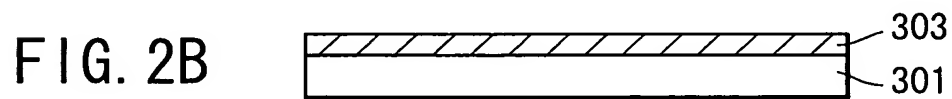
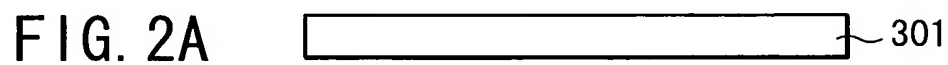


FIG. 1



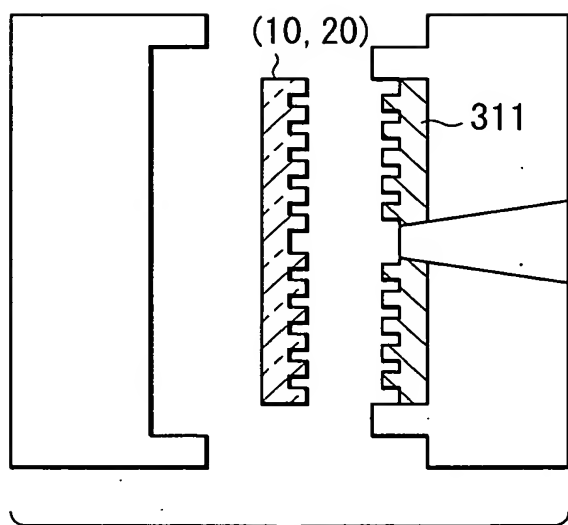


FIG. 2F

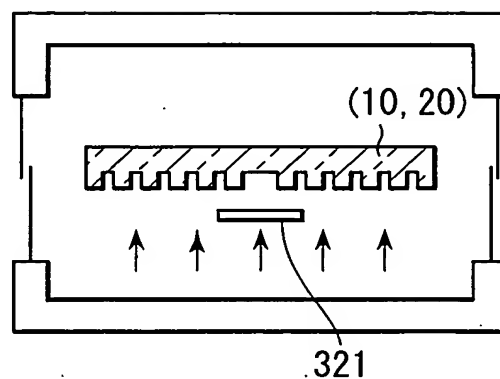


FIG. 2G

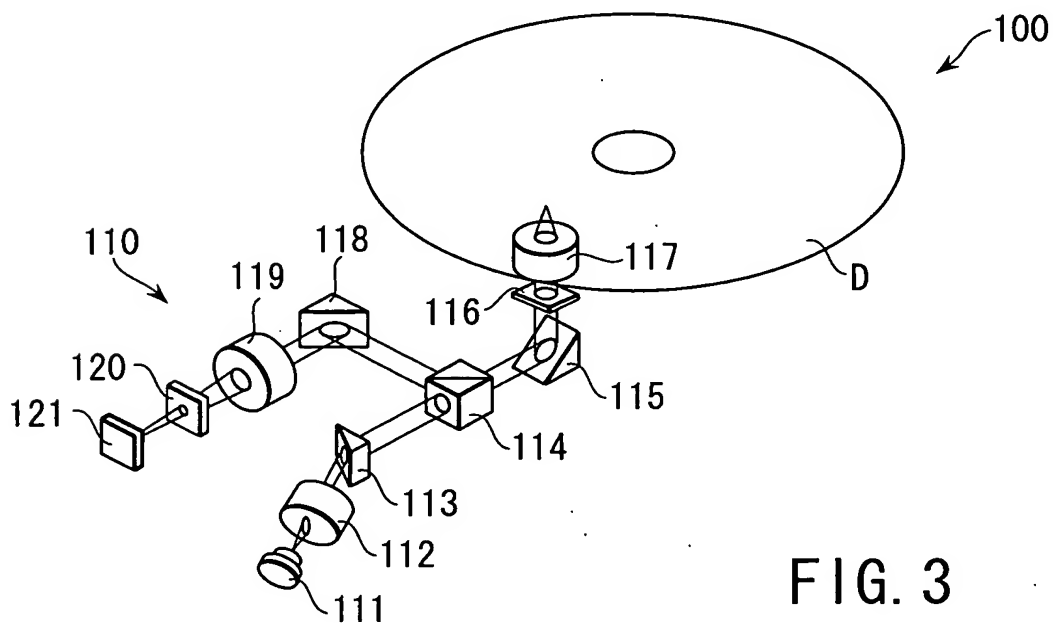


FIG. 3

FIG. 2H

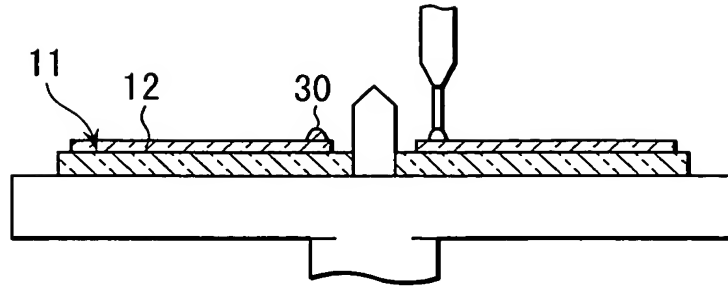


FIG. 2I

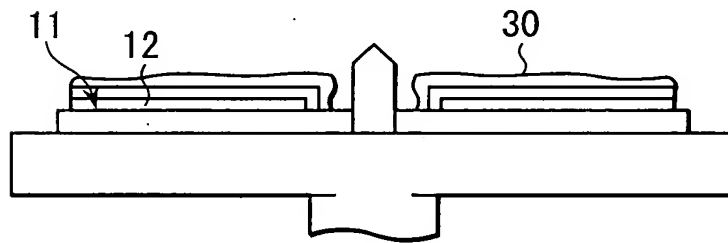


FIG. 2J

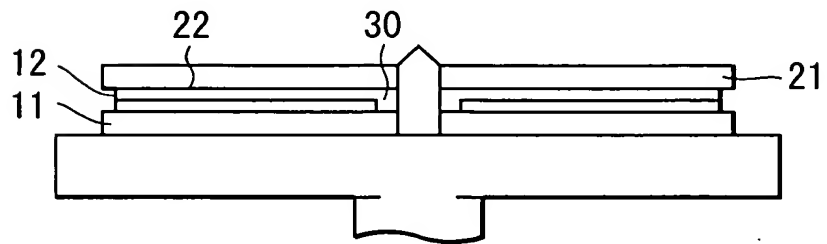
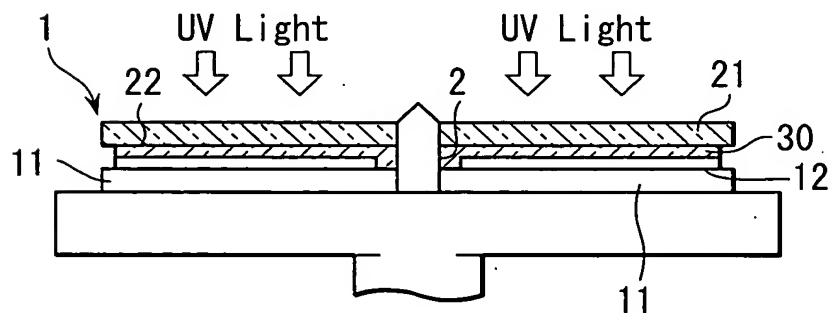


FIG. 2K



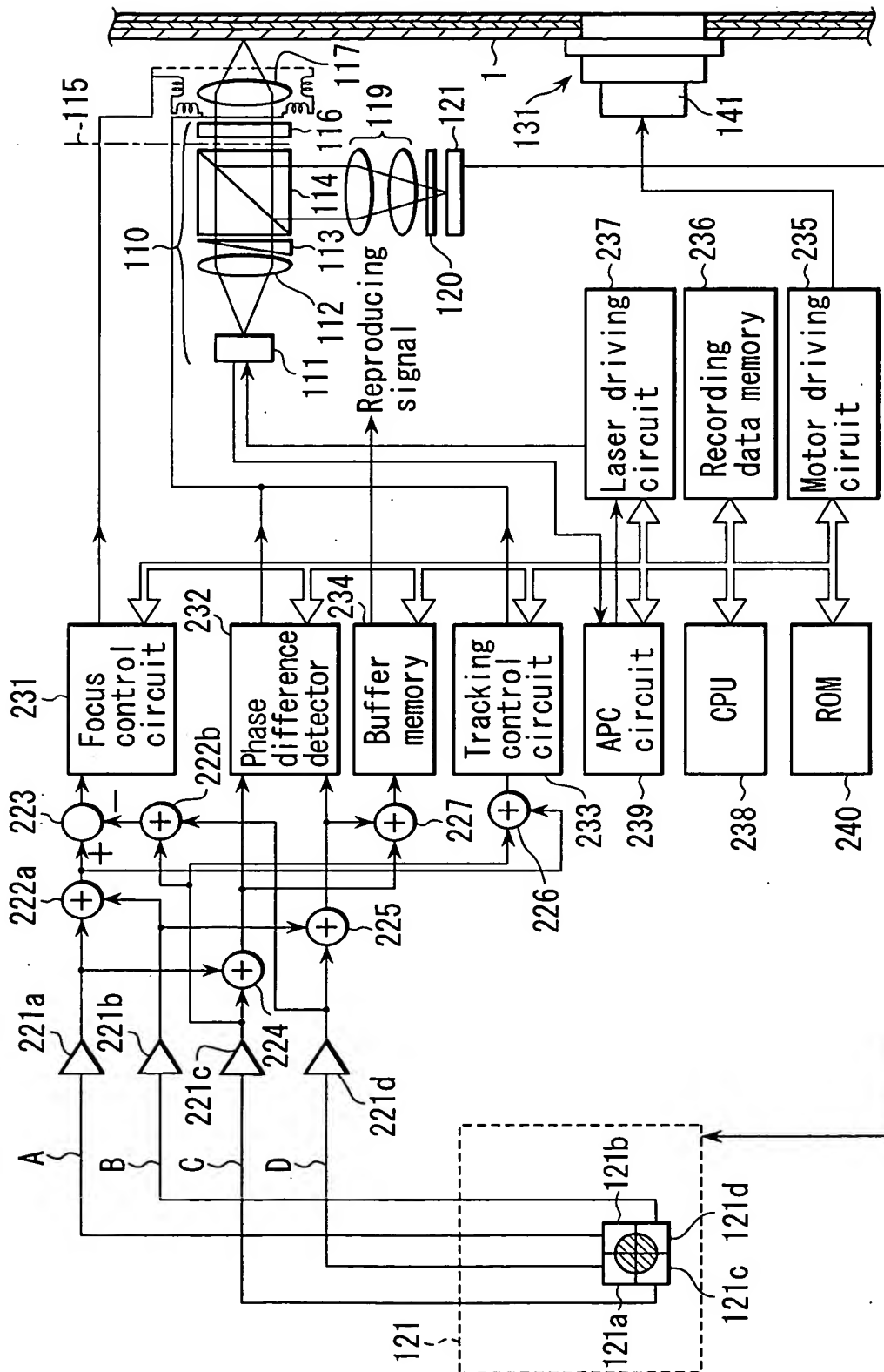


FIG. 4

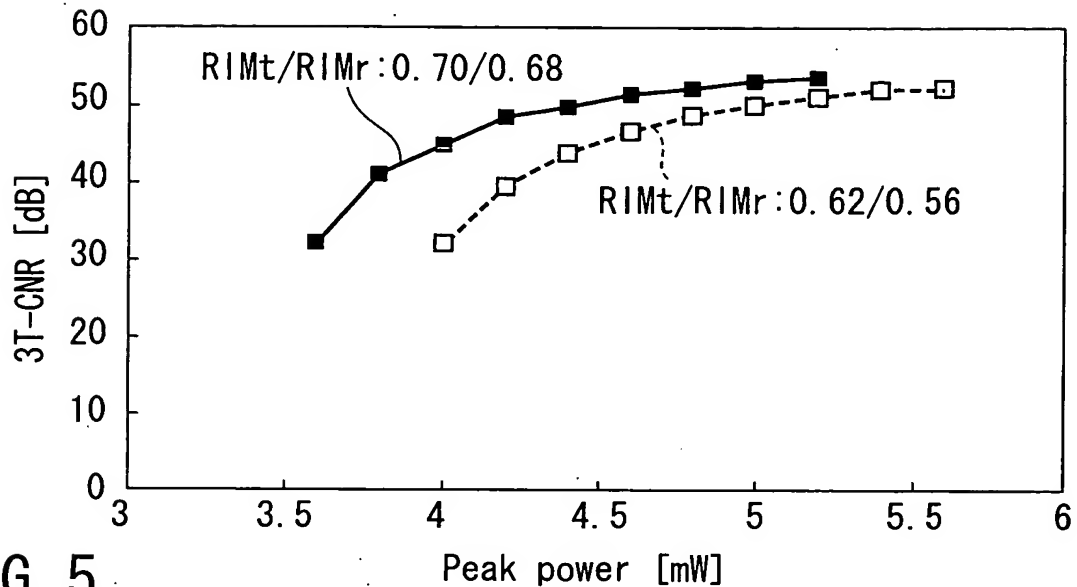


FIG. 5

Explanatory view of recording data density in each area of rewritable information recording medium

Parameter		Single layer
<ul style="list-style-type: none"> <li>• User data capacity</li> <li>• Wavelength of laser diode</li> <li>• Numerical aperture of objective lens</li> </ul>		20 Gbytes/side
		405 nm
		0.65
• Data bit length	System lead-in area	0.306 $\mu$ m
	Data lead-in area	0.130 to 0.140 $\mu$ m
	Data area	
	Data lead-out area	
• Channel bit length	System lead-in area	0.204 $\mu$ m
	Data lead-in area	0.087 to 0.093 $\mu$ m
	Data area	
	Data lead-out area	
• Minimum mark length (2T)	System lead-in area	0.408 $\mu$ m
	Data lead-in area	0.173 to 0.187 $\mu$ m
	Data area	
	Data lead-out area	
• Maximum mark length (13T)	System lead-in area	2.652 $\mu$ m
	Data lead-in area	1.126 to 1.213 $\mu$ m
	Data area	
	Data lead-out area	

FIG. 6A

• Track pitch	System lead-in area	0.68 $\mu$ m
	Data lead-in area	0.34 $\mu$ m
	Data area	
• Physical address	Data lead-out area	
	Data lead-in area	*WAP
	Data area	*WAP= Wobble Address in Periodic position
• Data lead-out area	Data lead-in area	
	Data area	
	Data lead-out area	
• Disk diameter • Disk thickness • Central hole diameter • Inner diameter of data area • Data area diameter		120 mm
		1.20 mm
		15.0 mm
		24.1 mm
		57.89 mm
• User data/sector • Error correction code • ECC constraint sector • Modulation		2048 bytes
		Read solomon product code
		RS (208, 192, 17)
		× RS (182, 172, 11)
		32 sector
• Correctable burst error length		ETM, RLL (1, 10)
	System lead-in area	7.1 mm
	Data lead-in area	6.0 mm
	Data area	
	Data lead-out area	
• Reference scanning speed	System lead-in area	6.61 m/s
	Data lead-in area	5.64 to 6.03 m/s
	Data area	
	Data lead-out area	
• Channel bit rate with reference speed	System lead-in area	32.40 Mbps
	Data lead-in area	64.80 Mbps
	Data area	
• User bit rate with reference speed	Data lead-out area	
	System lead-in area	18.28 Mbps
	Data lead-in area	36.55 Mbps
	Data area	
	Data lead-out area	

FIG. 6B

Explanatory view of data structure of lead-in area in rewritable information recording medium

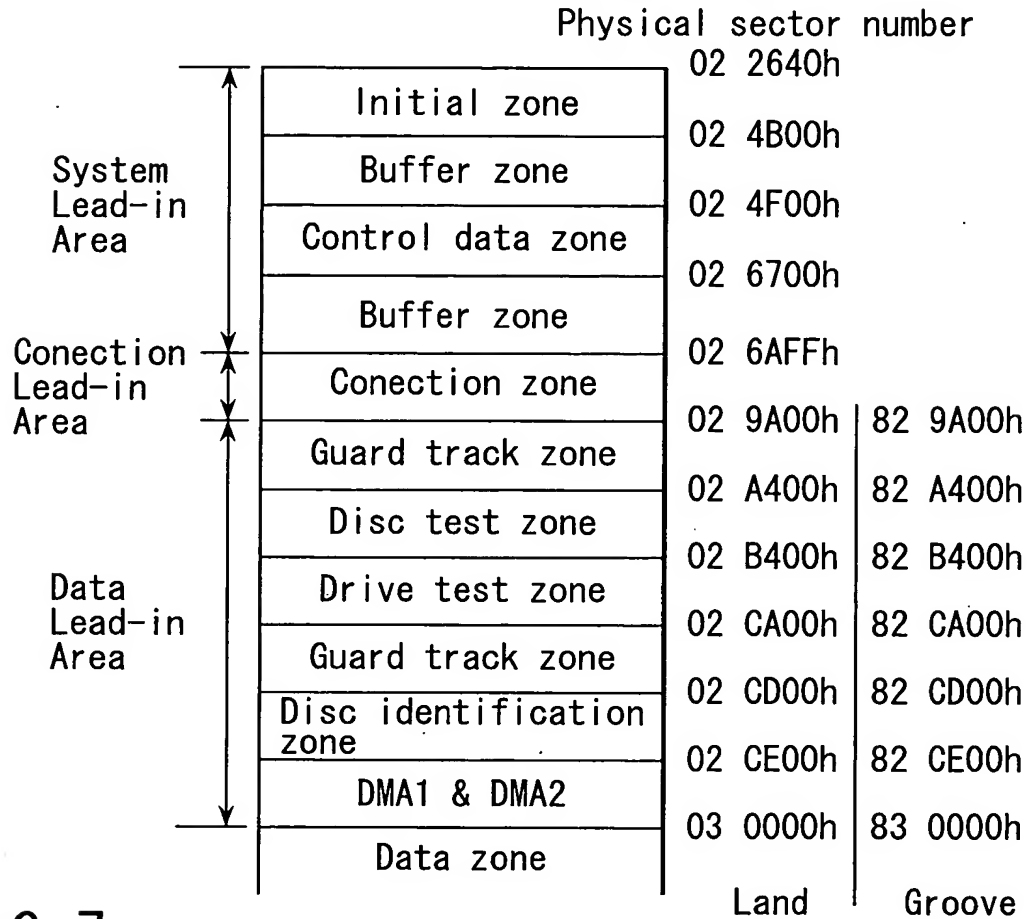


FIG. 7

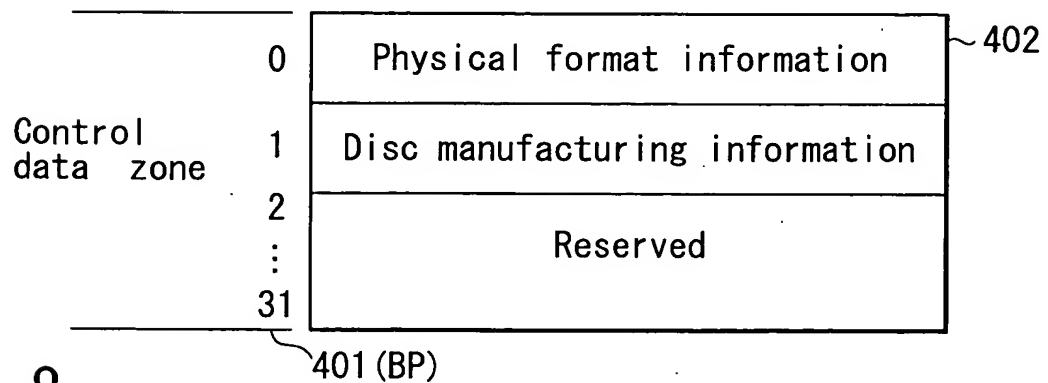


FIG. 8

501	502	503
BP	BP Contents	Number of bytes
0	Book type and Part version	1 byte
1	Disc size and maximum transfer rate of the disc	1 byte
2	Disc structure	1 byte
3	Recording density	1 byte
4 to 15	Data area allocation	12 bytes
16	BCA descriptor	1 byte
17 to 31	reserved	15 bytes
...	...	...
AZ (33)	Velocity	1 byte
BA (34)	Rim intensity in tangential direction	1 byte
BB (35)	Rim intensity in radial direction	1 byte
BC (36)	Read power	1 byte
BD (37)	Peak power for land tracks	1 byte
BE (38)	Bias power1 for land tracks	1 byte
BF (39)	Bias power2 for land tracks	1 byte
BG (40)	Bias power3 for land tracks	1 byte
B <sub>n</sub> (41)	Peak power for groove tracks	1 byte
RY		

FIG. 9A



BX (42)	Bias power1 for groove tracks	1 byte
BY (43)	Bias power2 for groove tracks	1 byte
BZ (44)	Bias power3 for groove tracks	1 byte
CA (45)	First pulse end time for land tracks	1 byte
CB (46)	Multi pulse duration for land tracks	1 byte
CC (47)	Last pulse start time for land tracks	1 byte
CD (48)	Bias power2 duration for land tracks, Mark 2T	1 byte
CE (49)	Bias power2 duration for land tracks, Mark 3T	1 byte
CF (50)	Bias power2 duration for land tracks, Mark $\geq 4T$	1 byte
CG (51)	First pulse start time for land tracks, Mark 2T, Leading Space 2T	1 byte
CH (52)	First pulse start time for land tracks, Mark 3T, Leading Space 2T	1 byte
CI (53)	First pulse start time for land tracks, Mark $\geq 4T$ , Leading Space 2T	1 byte
CJ (54)	First pulse start time for land tracks, Mark 2T, Leading Space 3T	1 byte
CK (55)	First pulse start time for land tracks, Mark 3T, Leading Space 3T	1 byte
CL (56)	First pulse start time for land tracks, Mark $\geq 4T$ , Leading Space 3T	1 byte
CM (57)	First pulse start time for land tracks, Mark 2T, Leading Space $\geq 4T$	1 byte
CN (58)	First pulse start time for land tracks, Mark 3T, Leading Space $\geq 4T$	1 byte
CO (59)	First pulse start time for land tracks, Mark $\geq 4T$ , Leading Space $\geq 4T$	1 byte
CP (60)	Last pulse end time for land tracks, Mark 2T, Trailing Space 2T	1 byte

FIG. 9B

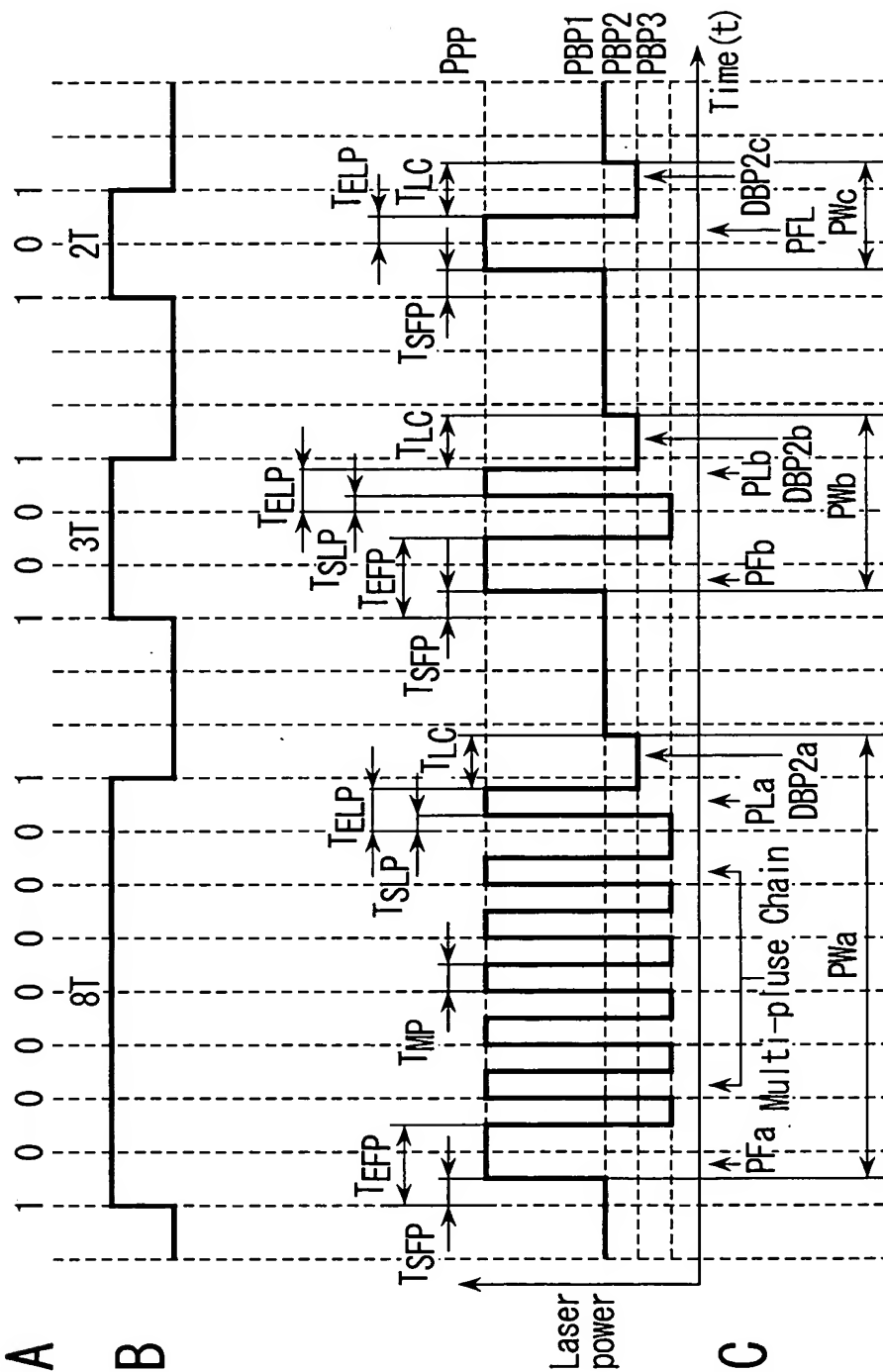
CQ (61)	Last pulse end time for land tracks, Mark 3T, Trailing Space 2T	1 byte
CR (62)	Last pulse end time for land tracks, Mark $\geq 4T$ , Trailing Space 2T	1 byte
Cu (63)	Last pulse end time for land tracks, Mark 2T, Trailing Space 3T	1 byte
Cv (64)	Last pulse end time for land tracks, Mark 3T, Trailing Space 3T	1 byte
Cw (65)	Last pulse end time for land tracks, Mark $\geq 4T$ , Trailing Space 3T	1 byte
CX (66)	Last pulse end time for land tracks, Mark 2T, Trailing Space $\geq 4T$	1 byte
CY (67)	Last pulse end time for land tracks, Mark 3T, Trailing Space $\geq 4T$	1 byte
CZ (68)	Last pulse end time for land tracks, Mark $\geq 4T$ , Trailing Space $\geq 4T$	1 byte
DA (69)	First pulse end time for groove tracks	1 byte
DB (70)	Multi pulse duration for groove tracks	1 byte
DC (71)	Last pulse start time for groove tracks	1 byte
DD (72)	Bias power2 duration for groove tracks, Mark 2T	1 byte
DE (73)	Bias power2 duration for groove tracks, Mark 3T	1 byte
DF (74)	Bias power2 duration for groove tracks, Mark $\geq 4T$	1 byte
DG (75)	First pulse start time for groove tracks, Mark 2T, Leading Space 2T	1 byte
DH (76)	First pulse start time for groove tracks, Mark 3T, Leading Space 2T	1 byte
DI (77)	First pulse start time for groove tracks, Mark $\geq 4T$ , Leading Space 2T	1 byte
DJ (78)	First pulse start time for groove tracks, Mark 2T, Leading Space 3T	1 byte
DK		

FIG. 9C

DK (79)	First pulse start time for groove tracks, Mark 3I, Leading Space 3I	1 byte
DL (80)	First pulse start time for groove tracks, Mark $\geq 4I$ , Leading Space 3I	1 byte
DM (81)	First pulse start time for groove tracks, Mark 2I, Leading Space $\geq 4I$	1 byte
DN (82)	First pulse start time for groove tracks, Mark 3I, Leading Space $\geq 4I$	1 byte
DO (83)	First pulse start time for groove tracks, Mark $\geq 4I$ , Leading Space $\geq 4I$	1 byte
DP (84)	Last pulse end time for groove tracks, Mark 2I, Trailing Space 2I	1 byte
DQ (85)	Last pulse end time for groove tracks, Mark 3I, Trailing Space 2I	1 byte
DR (86)	Last pulse end time for groove tracks, Mark $\geq 4I$ , Trailing Space 2I	1 byte
Du (87)	Last pulse end time for groove tracks, Mark 2I, Trailing Space 3I	1 byte
Dv (88)	Last pulse end time for groove tracks, Mark 3I, Trailing Space 3I	1 byte
Dw (89)	Last pulse end time for groove tracks, Mark $\geq 4I$ , Trailing Space 3I	1 byte
DX (90)	Last pulse end time for groove tracks, Mark 2I, Trailing Space $\geq 4I$	1 byte
DY (91)	Last pulse end time for groove tracks, Mark 3I, Trailing Space $\geq 4I$	1 byte
DZ (92)	Last pulse end time for groove tracks, Mark $\geq 4I$ , Trailing Space $\geq 4I$	1 byte
EA (93) to FZ (140)	Disc manufacturer's name	m (48) bytes
GA (141) to Gn (156)	Disc manufacturer's supplementary information	n (16) bytes
Over Gn+1 (155 to 2047)	reserved	k (1892) bytes

FIG. 9D

FIG. 10A



**FIG. 10B**

FIG. 10C

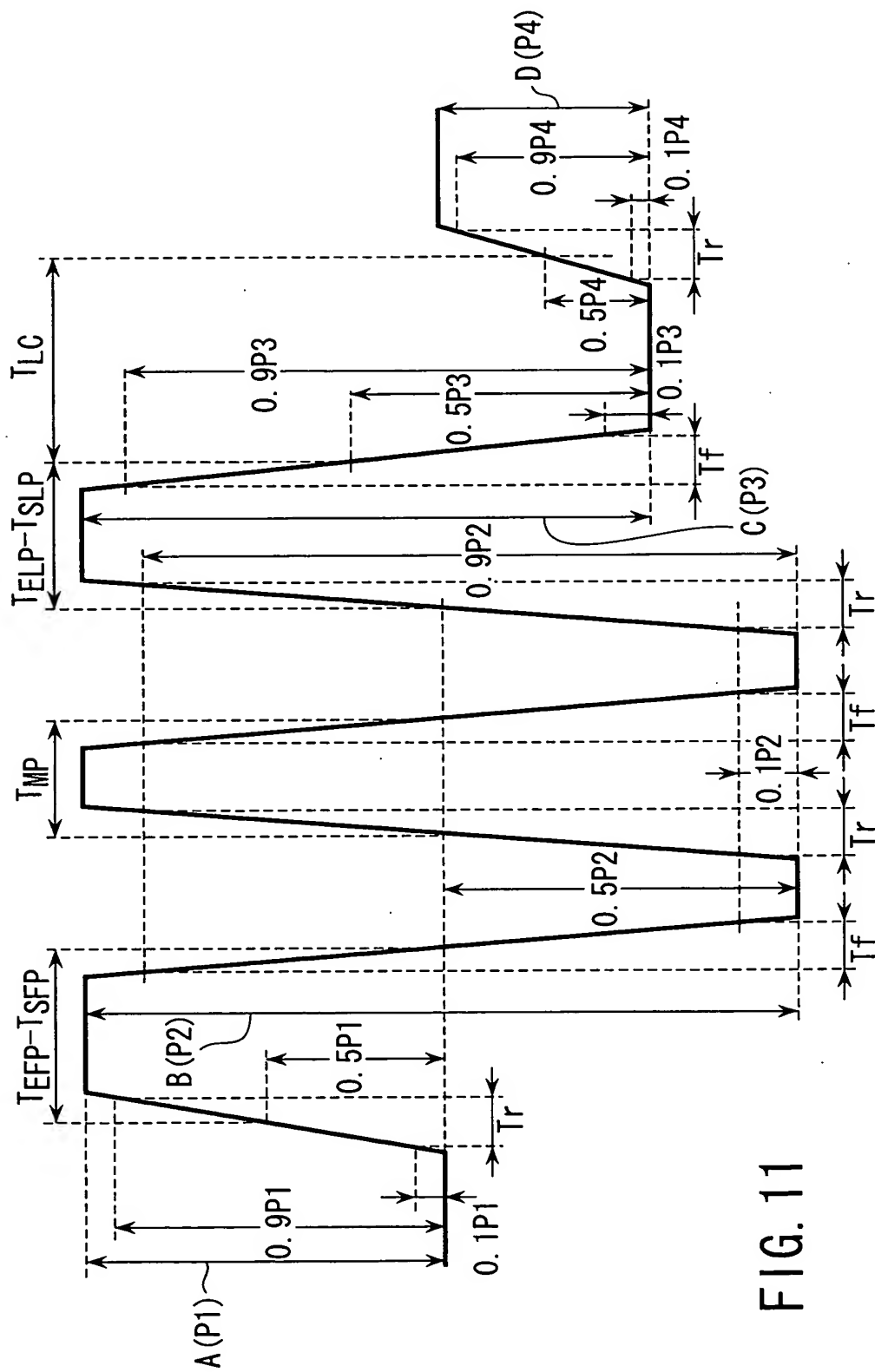


FIG. 11